



MEETING

Meeting Date 10 May 2022

Ref MoMAAUG#8

ESDC-GEN-MOM-0030

Meeting Place WebEx

Chairperson Natalie Webb

Minute's Date 6 June 2022

Participants

AAUG Members: Natalie Webb (AAUG Chair), Hervé Bouy, Ioannis Georgantopoulos, Søren Larsen, Sandra Savaglio, Eva Villaver.

In attendance: Guido de Marchi (ESDC Science Lead), Bruno Merín (Head of ESDC), Norbert. Schartel (XMM-Newton Project Scientist and Project Scientist's representative), Deborah Baines (ESASky Support Scientist), Bruno Altieri (Euclid Archive Scientist), Hector Canovas (Gaia Archive Support Scientist), Jos de Bruijne (Gaia deputy Project Scientist), Peter Kretschmar (XMM-Newton Archive Scientist), Elena Jimenez Bailon (XMM-Newton Support Archive Scientist), Alvaro Labiano (JWST Support Archive Scientist), Rene Laurejjs (Euclid Project Scientist), Arnaud Masson (Heliophysics Archives Science Lead), Sara Nieto (Euclid Mission Technical Interface), Monica Fernandez (PLATO Mission Technical Interface).

Absent: Christopher Conselice (sent his apologies).

Subject Minutes of the Astronomy Archives User Group (AAUG) meeting #8.

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Description	Action	Status
AAUG members to investigate one EU project each, investigate the type of data products from ESA missions that the project will be creating, advise ESDC what to ask the project PI, and if there is enough information at this point, recommend if the data should be added to any of the ESA science archives.	2019-02-13/13	IN PROGRESS
D. Baines and G. de Marchi to undertake the replacement for the 8 th member of the AAUG. In meeting #6 the AAUG agreed to give suggestions for new AAUG members to ESDC by end of April 2021. ESDC to also poll the AWG and JWST and Euclid colleagues for names.	2020-10-02/01	IN PROGRESS
ESDC to send the Gaia statistics on the number of	2020-10-02/02	IN PROGRESS



Description	Action	Status
queries received through the different modes of accessing the archive (UI, cone search, astroquery).		
ESDC to begin contacting the PIs of the identified EU projects to gauge their interest in ESA preserving their project data.	2020-10-02/06	IN PROGRESS
ESDC to also contact the PIs for the five recently identified EU H2020 and FP7 projects (action linked to Action 2020-10-02/06).	2021-04-14/03	OPEN
ESDC to report the ESASky feedback to the ESASky team and to add each them to the ESASky backlog.	2021-10-28/01	CLOSED
ESDC to circulate a doodle to find dates for the next AAUG meeting, to be held in Spring 2022.	2021-10-28/02	CLOSED
ESDC to email the AAUG and finalise the dates for the next AAUG meeting, to be held in September 2022.	2022-05-10/01	Due: June 2022
AAUG members to poll their communities for feedback, suggestions and comments that they would like to be raised in the September 2022 AAUG meeting	2022-05-10/02	Due: June 2022



WELCOME:

N. Webb and G. de Marchi opened the meeting on Tuesday 10th May 2022 by welcoming everyone and summarising the main topics to be discussed during the meeting. The meeting was held via telecon due to the global COVID-19 pandemic and since it was a shorter meeting (the autumn 2022 meeting is planned to be held in person).

ADOPTION OF THE AGENDA:

The agenda of the meeting was presented and adopted by the AAUG members.

REVIEW OF ACTIONS:

The actions from the previous meeting were reviewed. Five actions remain open. Three of these actions are related to the EU H2020 and FP7 projects. The actions are the following: **Action 2019-02-13/13**: AAUG members to investigate one EU project each, investigate the type of data products from ESA missions that the project will be creating, advise ESDC what to ask the project PI, and if there is enough information at this point, recommend if the data should be added to any of the ESA science archives. **Action 2020-10-02/06**: ESDC to begin contacting the PIs of the identified EU projects to gauge their interest in ESA preserving their project data. **Action 2021-04-14/03**: ESDC to also contact the PIs for the five recently identified EU H2020 and FP7 projects (action linked to Action 2020-10-02/06). No new work has been conducted on these actions since the last meeting. However, there will be a new external contract covering the data curation and repatriation of ESA data, to start in the summer of 2022. The company or consortium that wins the contract will then start working on the data curation of the EU projects. ESDC should be able to report something at the next AAUG meeting related to these actions.

The two other open actions have the following status: **Action 2020-10-02/01**: D. Baines and G. de Marchi to undertake the replacement for the 8th member of the AAUG. The ESDC are still looking for a replacement. A possible member was suggested during the meeting and will be contacted by G. de Marchi within the next couple of weeks. **Action 2020-10-02/02**: ESDC to send the Gaia statistics on the number of queries received through the different modes of accessing the archive (UI, cone search, astroquery). This action is in progress and will be presented at the next AAUG meeting by the Gaia Archive Scientist.

Related to the closed action **2021-10-28/01**: ESDC to report the ESASky feedback to the ESASky team and to add each them to the ESASky backlog, D. Baines reported on the recent updates added to ESASky. A number of suggestions given by the AAUG at the last meeting have already been implemented in ESASky, including making cone searches available. The AAUG gave further recommendations on functionalities to add to ESASky (see **Recommendation 2022-05-10/01**).



PRESENTATIONS:

The following presentations and discussion sessions were held on 10th May 2022:

1. Assessment of the Archival Research Visitor Programme proposals (G. de Marchi)
2. ESA Astronomy Archives session at EAS 2022 (G. de Marchi, D. Baines, N. Webb)
3. Date and time of next meeting (All)
4. AOB
5. Closed session

The slides of the presentations are available on the ESAC Science Data Centre (ESDC) public web site, under the heading Archives User Groups, Astronomy: <https://www.cosmos.esa.int/web/esdc/aaug/meeting8>.

DISCUSSIONS:

Discussions took place during and after each presentation. This section presents a summary of the discussions and is ordered by the scheduled agenda given above.

1. Assessment of the Archival Research Visitor Programme

G. de Marchi presented a summary on the Archives Research Visitor Programme proposals review regarding the latest call (deadline was 31st April 2022). The programme was launched at the beginning of March 2021 and aims to increase the scientific return from ESA missions by inviting scientists to ESAC and ESTEC who are interested in pursuing research based on publicly available data in the ESA Space Science Archives. This is the programme's third call and 18 applications have been received. ESA expects to be able to host 5 to 6 visitors in this round. Successful applicants will be notified informally by 20th June 2022. The outcome will be announced via ESA science communication channels in early July. G. de Marchi asked the AAUG if they thought this should be brought forward to coincide with the Archives session at the European Astronomy Society (EAS) meeting on 28th June 2022. A discussion followed on this point. The AAUG felt that it will be sufficient to simply present the laureates, without requesting their presence at the meeting, since it will be rather late to ask people to attend the conference if they were not already planning on going (see **Recommendation 2022-05-10/02**). G. de Marchi said he would contact all applicants now and ask if they are happy for their names and field of research to be made public, if they are one of the successful applicants.

In this call, unexpectedly, only 22% of applicants were women (unlike previous calls where the distribution was more even). The numbers are small, so it is unknown if this is just a statistical fluctuation or something that needs to be addressed. G. de Marchi suggests a more proactive approach is needed to encourage female PhD students and postdocs to apply. The AAUG asked if a change in the demographics has also occurred, G. de Marchi said there are not any other changes. The AAUG suggests to monitor the situation in the next calls and if numbers of female applicants continue to be low in future calls, corrective actions could be employed

(see **Recommendation 2022-05-10/03**).

2. ESA Astronomy Archives session at EAS 2022

G. de Marchi presented the plans for the ESA Archives lunch session at the 2022 EAS Annual meeting. The session this year will be held on Tuesday 28th June. This year the meeting is fully in person, there is no provision for hybrid attendance. The aim of the session is to create awareness about the ESA Space Science Archives, create awareness about the AAUG and to engage the community in providing ideas and inputs as well as sharing with them the latest tools and features of the archives. The session will include a presentation on the Archives as a source of scientific discoveries, impact of archival papers and Archival Research Visitor Programme results; a presentation on the AAUG; an ESASky demo; and an ESA Datalabs presentation and demo. The last half an hour will be reserved for an open-floor discussions session. The preliminary programme is online and can be found here: <https://eas.unige.ch/EAS2022/session.jsp?id=LS5>.

G. de Marchi presented some ideas to make the lunch session easier for people to follow, how to best engage the community in the discussions and if we should poll the community at the session about how interested they are if ESA were to make data and software immediately public (i.e. no proprietary period). The community have already been asked this, for example, by NASA and the ERC. A discussion followed on these points. Regarding demos in the lunch session, the AAUG suggested to focus on the goal of these demos, which is to introduce the audience to ESASky and ESA Datalabs and then point them in the direction to learn more, which includes coming to the ESA booth. For the ESASky demo, the audience could be asked to open the tool in their browser and follow along if they wish. The AAUG also suggested that participants will be saturated with information from the week, and will remember a hands-on demo more clearly. It was suggested that a quick science case with ESASky could be presented, such as catalogue comparisons and finding the electromagnetic counterparts to neutrino events. A final idea from an AAUG member was to invite someone who is using ESASky for their science, and for them to demonstrate how they use the tool, as an example to showcase the success of ESASky.

Regarding the questions for the panel discussion, the AAUG agreed that asking the community about making data and software immediately public is a good idea. Also, that it will be good to have the panel discussion questions ready and made public before the session. This may motivate people to come to the session and give their opinion. G. de Marchi agreed these questions could be added to the session web page. Finally, G. de Marchi asked if any of the AAUG members were already attending the EAS meeting and wanted to join the lunch session panel. N. Webb, E. Villaver and S. Savaglio confirmed they were attending and can join the panel.

3. Date and time of next meeting

The next AAUG meeting will be held in person in Toulouse, with the proposed dates of the afternoon of 12th September and morning of 13th September 2022. It was agreed an email will be sent to the AAUG members



by the end of the week to fix the dates for the next meeting (**Action 2022-05-10/01**).

4. AOB

D. Baines raised a request from a previous discussion with the AAUG chair, to remind the AAUG members to ask for feedback from the community, in advance of the next AAUG meeting in September. N. Webb confirmed this raises awareness in the community of the AAUG and of the EAS archives. In order to be ready for the September meeting, N. Webb recommended that the AAUG members send out their request for feedback in the next two or three weeks (**Action 2022-05-10/02**). N. Webb said she will send an email to the AAUG members, as was done previously, with the text.

RECOMMENDATIONS

The following recommendations were formulated by the AAUG:

Ongoing Development of ESASky

Recommendation 2022-05-10/01: The recent developments to *ESASky* make it a very modern and intuitive support to accessing multi-wavelength and multi-messenger data. It is the ideal resource to support a wide range of data mining activities and as a result, the number of users accessing the portal continues to grow in number. The recent addition of neutrino events in quasi-real time demonstrates the potential that can be developed to support time domain astronomy, which is becoming a very important area of astrophysics and will continue to do so with upcoming observatories such as the Vera Rubin Observatory, the Square Kilometre Array (SKA), etc. To this end, the AAUG suggests that as well as adding the quasi-real time gravitational wave events from O4, planned for later this year, it could also be interesting to add gamma-ray bursts in the same manner. Further, providing the distance between a source of interest and its potential multi-wavelength/messenger counterparts would provide further information to help in identifying the true counterpart. Finally, adding the possibility to change the contrast of an image loaded by *ESASky* could help limit the visual search for either brighter or fainter objects in a given field of view. Again, this will allow the user to optimise the search for the true counterpart.

The Archival Research Visitor Programme

Recommendation 2022-05-10/02: The *Archival Research Visitor Programme* is becoming widely known in the community, which helps improve the visibility of the archives and fosters excellent science to be carried out with the data within the archives themselves. In order to raise the profile of the programme yet further, the AAUG recommends that the organisers take the opportunity of the Lunch Session LS5, *The ESA Space Science Archives* to be held during the *European Astronomical Society Annual Meeting* at the end of June 2022, to present the successful laureates of the April 2022 call for applications. The AAUG feel that it will be sufficient to simply present the laureates, without requesting their presence at the meeting.

Recommendation 2022-05-10/03: As mentioned above, the *Archival Research Visitor Programme* has been a great way to widely publicise the ESA archives, which is evident in the wide range of researchers responding to the three calls for applications that have so far opened. Whilst it was clear that as many women as men applied initially, there appears to be a downturn in the number of women applying in the most recent call. This downturn may not be significant, given the few tens of applicants for each call. However, the AAUG recommends that the organisers continue to survey the number of applicants, along with their gender and origin, to determine whether this downturn is just a statistical fluctuation or a significant result. Should it appear to continue in future calls, corrective actions could be employed such as including a sentence such as ‘We encourage applications from women and minorities.’ in the call for applications or through other similar strategies.